

Committed to the future of rural communities.

# Earth Day 2006



The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audio tape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

# **Table of Contents**

ARIZONA	3
CALIFORNIA	5
DELAWARE	7
IDAHO	9
ILLINOIS	12
INDIANA	25
KANSAS	27
MAINE	29
MARYLAND	31
MICHIGAN	33
MIINNESOTA	36
MISSOURI	42
NORTH DAKOTA	46
NEBRASKA	48
NEW HAMPSHIRE	51
NEVADA	54
NEW YORK	57
OHIO	59
OREGON	61
PENNSYLVANIA	64
SOUTH CAROLINA	66
SOUTH DAKOTA	69
TENNESSEE	72
TEXAS	75
VIRGINIA	78

WASHINGTON	. 8′
WISCONSIN	. 84
WEST VIRGINIA	. 80

# ARIZONA EARTH DAY 2006

# **Town of Chino Valley**

**Municipal Property Corporation** 

Loan: \$1,595,000 Grant: \$1,500,000 Total Sewer: \$3,095,000

Congressman: Rick Renzi, 1st

Senators: John McCain

Jon Kyl

## **Outline of Need:**

Chino Valley is a fast growing rural community in Arizona with a population of 7,835. The housing area known as Chino Meadows currently has 1,100 individual homes using septic systems. The potential for ground water contamination is high and the potential for future growth is low without a permanent solution to the septic tank problem.

Through this project, a wastewater collection system will be built that will provide sewer service to approximately 3,112 households.

# **How Rural Development Helped:**

Rural Development worked with Town staff to put together a comprehensive package that includes three funding/building phases over three years. Rural Development is providing \$3,095,000 during the first phase. The Arizona Water Infrastructure Finance Authority will be making a \$1,580,000 loan during phase one and the applicants will contribute \$2 million. The first phase funding totals \$6,675,000—nearly half of which comes from Rural Development.

# The Results:

The project will not only provide a safeguard against underground aquifer contamination, but will also provide growth potential for the community.

# CALIFORNIA EARTH DAY 2006

# TULARE COUNTY REDEVELOPMENT AGENCY

# **Cutler-Orosi Wastewater Facility Improvements**

Loan: \$1,900,000
Grant: \$1,000,000
EPA Grant: \$1,000,000
Local \$760,000

Total: \$4,660,000

Congressman: Devin Nunes, 21<sup>ST</sup> District

Senators: Dianne Feinstein

Barbara Boxer

## **Outline of Need:**

The Tulare County Redevelopment Agency has applied for assistance to upgrade the wastewater treatment plant operated by the Cutler-Orosi Joint Powers Wastewater Authority (JPWA). The JPWA oversees a regional plant serving six communities in Tulare County. The original plant was constructed in 1958. Although several upgrades have occurred since then, the plant is still in need of other significant upgrades to ensure that it can properly treat the wastewater to meet regulatory requirements. The severity of the problem was recognized by EPA who has also provided financial assistance. EPA grant funds were essential to this project to prevent imposing undue financial hardship on the low income residents that this facility serves. Cutler-Orosi JPWA should be recognized for proactive planning and their ability to maintain a highly functional wastewater treatment system. The redevelopment agency is using tax increment funds to pay for the improvements.

# **How Rural Development Helped:**

Rural Development staff worked with all six communities and County staff to develop a technically feasible, financially affordable project. The project involves numerous improvements to existing facilities including: the headworks, trickling filters, oxidation ditch, UV disinfection, effluent disposal, solids handling, and other ancillary systems.

### The Results:

When this project is complete, these Tulare County communities will be able to rely on a sound wastewater treatment system to serve them well into the future.

# DELAWARE EARTH DAY 2006

# **Kent County Levy Court**

# (Kitts Hummock and Willow Tree Mobile Home Park Communities)

Loan: \$ 2,289,935 Grant: \$1,250,000 Other: \$ 225,000

Total Sewer: \$3,764,935

Congressman: Michael N. Castle, At Large

Senators: Joseph R. Biden, Jr.

Thomas R. Carper

## **Outline of Need:**

Kitts Hummock and the Willow Tree Mobile Home Park are located approximately 3 miles east of Dover, DE. Both of these communities are lower income and are located in a coastal and high ground water area. The Kitts Hummock community is located directly along the Delaware Bay; some of the homes are waterfront properties. There are approximately 195 homes altogether in the two communities. Homes in the area have onsite septic systems or cesspools, some of which are failing. The homes are located on small lots and County permit regulations do not allow for the replacement of an onsite septic system. The opportunity for leaking or damaged systems to leak into the existing aquifer is a reality. The area of concern was identified in the 1995 Wastewater Facilities Advisory Council (WFAC) report and in 2002 by the County as having a compelling need for central sewer. The MHI for this area is \$37,031 well below the State MHI of \$48,796.

# **How Rural Development Helped:**

USDA Rural Development provided financing to Kent County Levy Court that will help them construct a gravity sewer collection system that connects to the County wastewater treatment facility via the pumping station at Dover Air Force Base.

### The Results:

When the project is complete the costal area, including Kitts Hummock and the Willow Tree residents, will have an environmentally efficient and safe disposal method for wastewater.

# IDAHO EARTH DAY 2006

# **City of Rupert**

 Loan:
 \$2,548,000

 Grant:
 \$863,000

 Idaho Dept. of Environmental Quality
 \$7,152,000

 Army Corp of Engineers:
 \$2,000,000

 City of Rupert:
 \$667,000

Total Sewer: \$13,230,000

Congressman: Mike Simpson, 2<sup>nd</sup> District

Senators: Larry Craig

Mike Crapo

### Outline of Need:

For years, it has been known by individuals living in the Rupert area that the wastewater treatment system was near its design capacity. Only the most severe hay fever suffers were unaware that there was a big time odor problem at the plant. Four years ago the City and Idaho Department of Environmental Quality (IDEQ) entered into an agreement to solve the problem. The timeline is nearing the end with large fines looming the project planning and development coming to fruition with construction planned to begin this summer. Nearby residents and periodically the entire City are reminded that the plant is unable to properly treat its waste and odor problems. IDEQ is monitoring the area to determine the level of odors.

The Rupert residents, which include 1,946 connections plus 250 commercial owners and 2 large food processors, through the City Council determined the best solution would be to upgrade the 28 year old plant. The City of Rupert accepted the challenge and began the painful process of increasing rates and designing changes to the plant four years ago. Through careful planning and the latest technology Rupert and its engineer, Forsgren and Associates, has been able to keep the plant cost within budget in the face of rapidly rising construction costs.

# **How Rural Development Helped:**

The City of Rupert contacted USDA Rural Development along with the Idaho Department of Environmental Quality and the Army Corps of Engineers for financing of the project. The existing collection system has been updated over the past 10 years. Infiltration and inflow problems have now been addressed. The proposed system will include the replacement of the existing aeration basin configuration with a mechanical treatment plant using the activated sludge

process. Solids handling facilities will be installed that include sludge storage and management facilities.

The plant will be capable of treating 2.3 million gallons per day annual average which provides for a 20 year growth pattern. The design incorporates features to enable simple future plant expansions as needed. The design increases the plant capacity by 18%, all within the existing footprint of the present site.

## The Results:

When this project is complete, Rupert will have a new wastewater treatment plant and a fresh smelling environment for the city and its neighbors. A main concern was the continued viability of its industrial customers which provide major employment for the town and are the footing of the local economy. Through extraordinary cooperation the major industry and commercial customers have laid the foundation for long-term growth and prosperity.

# ILLINOIS EARTH DAY 2006

# **ABS Water Co-Operative**

Loan: \$472,000.00

Total Water: \$472,000.00

Congressman: Lanes Evans, 17th and Ray LaHood, 18th

Senators: Richard Durbin

Barack Obama

# **Outline of Need:**

ABS Water Co-Operative is presently operating out of a rented building with only 575 square feet which is not handicap accessible. The new building area will be approximately 1,824 square feet and will provide an office area, meeting area and maintenance building and will meet all of the requirements of the Rehabilitation Act of 1973 and be ADA compliant. It will be located in Clayton, IL which is a central location for the 2,151 users that the Co-Operative serves. The new facility will have a drive-up window and its own parking lot which will enable the Co-Operative to better serve their customers.

# **How Rural Development Helped:**

Rural Development has been actively involved with ABS Water Co-Operative over the last 24 years approving loan and grant funds totaling over \$11,000,000 which has enabled them to provide potable water to over 2,151 users. This project will enhance the service that ABS provides to their customers by giving them a facility in which all individuals can access to pay their water bills or make inquires.

### The Results:

When this project is complete, ABS Water Co-Operative will have a facility that will meet all of the requirements of the Rehabilitation Act of 1973, will be ADA compliant and will be centrally located to all its current 2,151 users.

# Dana/Longpoint/Reading/Ancona Public Water District

Loan: \$ 1,100,000.00 Grant: \$ 900,000.00 Other: \$ 1,500,430.00

Total Water: \$3,253,000.00

Congressman: Jerry Weller, 11th District

Timothy Johnson, 15<sup>th</sup> District

Senators: Richard Durbin

Barack Obama

### Outline of Need:

Dana/Longpoint/Reading/Ancona Public Water District was formed to serve a rural area that has low quality and quantities of water. The District will serve parts of Livingston and LaSalle Counties. The communities that will be served are Reading, Ancona, Long Point and Dana. None of these communities have public water systems. The water district will also serve a small number of residents that live between these communities. The existing water supply for the planning area consists of individual domestic wells, which vary significantly in quality of water supplied.

# **How Rural Development Helped:**

This project will connect to an 8" water main owned and operated by Illinois American Water Company at Illinois Route 17 near Woodland School. A 6" waterline will be constructed from Streator to the communities of Reading, Ancona, Long Point and Dana. A 75,000 gallon elevated standpipe and booster pump station at the far end of the system in Dana will also be constructed for pressure control. The water system will serve 210 residential customers.

## The Results:

Currently the residents in the District are hauling and treating water from private wells. This project will allow them access to a safe and reliable supply of water.

# **E J Water Corporation**

Loan: \$1,175,000.00 Grant: \$520,000.00 Other: \$2,181,000.00

Total Water: \$3,876,000.00

Congressman: Timothy Johnson, 15<sup>th</sup>

John Shimkus, 19<sup>th</sup>

Senators: Richard Durbin

Barack Obama

## **Outline of Need:**

The area being served by this project entails customers in Greenup, Sumpter and Crooked Creek Townships in Cumberland County and Grandville Township in Jasper County. The groundwater for farm and domestic use in this area is obtained from several sources. Large-diameter dug/bored wells and small-diameter drilled wells are all used within this area for domestic groundwater supplies. Many of these wells have been tested by the Illinois Department of Public Health and have been found to be contaminated and improperly constructed. Of the 188 private water supplies tested in Jasper and Cumberland Counties by the County Health Departments, 77% tested positive for high levels of coli form bacteria and 43% were found to have escherichia coli (E-coli). Typically, the water is hard and contains enough iron to cause staining of laundry and porcelain fixtures.

# **How Rural Development Helped:**

This project is Phase XX of an existing rural water system. It will serve 245 new customers with potable water and will require about 91 miles of water main. All of the proposed water main will connect to existing 4", 6", and 8" water main that was constructed during Phases VI, IX, and XVII and will also complete loops in the project area to help enhance flows and serve the rural residents in this area. An elevated water tower which is currently owned by E J Water Corporation will be moved from Rose Hill in Jasper County to Hazel Dell at Crooked Creek Township in Cumberland County. USDA Rural Development funding will be leveraged with \$ 2,034,000 in Community Development Block Grants and an applicant contribution of \$147,000 from connection fees.

# The Results:

With the completion of this Phase, E J Water Corporation will serve an additional 245 customers with safe, dependable, potable water. There will no longer be individuals who need to haul their drinking water.

# **Lincoln Prairie Water Company**

Loan: \$1,112,000.00 Grant: \$750,000.00 Other: \$1,246,000.00

Total Water: \$3,108,000.00

Congressman: Lane Evans, 17<sup>th</sup>

John Shimkus, 19th

Senators: Richard Durbin

Barack Obama

### **Outline of Need:**

This project is for Phase III of the Lincoln Prairie Water Company. Phase III will serve the communities of Oconee, Wenonah, Ohlman and surrounding rural residents. These users are dependent on improperly constructed and often contaminated or even non-existent privately owned water wells. A number of these privately owned water wells have been tested by the Shelby County Health Department and/or the Illinois Department of Public Health and have been found to be improperly constructed, and as a result are contaminated. This represents a persistent and chronic threat to the local health and safety of such disadvantaged residents. Even if such private water wells were to be renovated and re-constructed in accordance with the most current state standards, the groundwater generally found within the target area contains dissolved minerals that lead to high iron and hardness further hindering the possibility of high quality potable drinking water. In addition, the proposed project "target area", focusing upon the Villages of Oconee, Wenonah, and Ohlman, contains only small amounts of ground water, as reported by the Illinois State Water Survey, further hindering the possibility of utilizing private wells as a long-term, dependable water supply for such low and moderate-income households.

# **How Rural Development Helped:**

This project will construct 48 miles of 4", 6" and 8" water line to serve 240 additional rural water users. A booster station and a 100,000 gallon water tower located near the Village of Ohlman will also be constructed.

# The Results:

Upon completion of this project, the residents of Oconee, Ohlman, and Wenonah will be supplied with an adequate amount of potable water to drink, bathe, and wash their clothes without the concern of discoloration or a health hazard.

# **Lincoln Prairie Water Company**

Loan: \$ 584,000.00 Grant: \$ 86,000.00 Other: \$ 944,000.00

Total Water: \$1,614,000.00

Congressman: John Shimkus, 19<sup>th</sup>

Senators: Richard Durbin

Barack Obama

## **Outline of Need:**

This project is for Phase IV of the Lincoln Prairie Water Company. Phase IV will serve 110 households with potable water in Rural and Ridge Townships in Shelby County. These households are dependent on improperly constructed, contaminated or even non-existent privately owned water wells.

# **How Rural Development Helped:**

Phase IV involves the construction of approximately 41 miles of 4" and 6" diameter waterlines which will connect to the existing 6" water main constructed in Phase I of this water system. Water will be supplied by the City of Shelbyville.

# The Results:

Upon completion of this project, the rural residents of Rural and Ridge Townships in Shelby County will be supplied with an adequate amount of potable water to drink, bathe, and wash their clothes without the concern of discoloration or a health hazard.

# **Montgomery County Water Company**

Loan: \$ 500,000.00 Grant: \$ 640,000.00 Other: \$ 400,000.00

Total Water: \$1,540,000.00

Congressman: Lane Evans, 17<sup>th</sup> and John Shimkus, 19<sup>th</sup>

Senators: Richard Durbin

Barack Obama

## **Outline of Need:**

The Montgomery County Water Company has been in existence since July 1997 with a goal to provide potable water service to all of the areas of Montgomery County. This project will construct a water distribution system which is expected to serve 100 rural households and farmers in the East sector near Vanderburg and the West sector Northwest of Butler in Montgomery County. The majority of this service area has no water service. This project will also tie the system into the community of Butler to allow emergency water to supplement both supplies in case of an emergency, and will replace water service from Litchfield via a water main under Lake Lou Yeager. This water main was laid a number of years ago by individuals who laid their own water main and would like to now connect into this system.

Well Sampling of 72 wells resulted in 48 of those wells being contaminated. Testing indicated high levels of coli form bacteria and the majority of the samples tested positive for nitrate contamination. If no action is taken, the rural households and farms will continue to face the health risks of poor quality of available water. The development of this phase of the system will provide those individuals with a good, dependable water supply.

# **How Rural Development Helped:**

With the addition of this phase, Rural Development will have provided funding to Montgomery County Water Company in the total amount of \$5,348,750 which has provided potable water to 680 users. Illinois Department of Commerce and Economic Opportunity (DCEO) has also provided financing for the previous phases and will provide a \$400,000 CDAP grant to the Water Company for this phase, as well. The proposed phase will encompass a total of 41 miles of 4" and 6" PVC water lines connecting to existing water mains. Construction will be confined to private easements parallel to the public right of way.

# The Results:

When this project is complete, an additional 100 rural households and farms in Montgomery County will have a safe and dependable potable water supply.

# Village of DeSoto

Loan: \$ 1,000,000.00
Grant: \$ 386,000.00
Other: \$ 401,735.00

Total Sewer: \$1,787,735.00

Congressman: Jerry Costello, 12<sup>th</sup>

Senators: Richard Durbin

Barack Obama

## **Outline of Need:**

The existing treatment plant has been cited by the Illinois Environmental Protection Agency for violations of the effluent limitations contained in the Village's NPDES permit which is the federal discharge permit that regulates the wastewater treatment plant. The plant is at the end of its 20 year design life and numerous repairs are necessary to upgrade existing equipment. The plant has deteriorated to the point that without expending additional monies to upgrade and renovate the plant the existing process is not capable of providing adequate treatment during most average flow days, much less during high flow (rainfall events). All of the pump stations have undersized or oversized pumping capacities which ultimately results in sewer main surcharging or flooding of downstream pump stations.

## **How Rural Development Helped:**

The proposed best alternative is to totally replace the existing wastewater plant with a new facility, adjacent to the existing plant. This alternative consists of the construction of a three cell aerated lagoon with rock filter, chlorination facilities, renovation of effluent pump stations and all associated electrical and piping modifications and necessary property acquisitions.

# The Results:

The proposed improvements will eliminate health and safety issues associated with non-compliance at the sewage treatment plant and discharges of sanitary sewer out of the collection system.

# **West Prairie Water CO-OP**

Loan: \$1,381,000.00
Grant: \$830,000.00
Other: \$350,000.00
Total Water: \$2,561,000.00

Congressman: Lane Evans, 17<sup>th</sup>

Senators: Richard Durbin

Barack Obama

### **Outline of Need:**

The West Prairie Water CO-OP was formed in 2004 to serve rural residents of McDonough County in Illinois. The goal of the Co-Operative is to provide water to all rural residents needing potable water in Bethel, Blandinsville, Chalmers, Colchester, Emmet, Hire, Industry, Lamoine, Sciota and Tennessee townships. This project will fund the development of a water distribution system which is expected to serve 200 rural households and farmers in Colchester and Tennessee townships with adjacent customers in Chalmers, Hire, Emmett and Bethel Townships.

The service area's current water supply comes primarily from individual shallow wells. For over 15 years, the County Health Department has monitored ground water near this area. They have found that 87.6% of the wells are contaminated with E. coli bacteria. In addition over 80% of wells showed concentrations of nitrates. Many residents complain of black colored water and "rotten egg" smells from their water source. This requires individuals to purchase or haul water to be used for consumption. If no action is taken the rural households and farms will continue to face the health risks of poor quality of available water. The development of this phase of the system will provide 200 rural households and farms with a good, dependable water supply.

## **How Rural Development Helped:**

Members of the CO-OP contacted USDA Rural Development along with the Illinois Department of Commerce & Economic Opportunity (DCEO) for financing of the project. DCEO will provide a \$350,000 CDAP grant to the CO-OP for this project, as well. The proposed project will consist of the construction of 4" and 6" PVC water mains, connecting to existing water mains from the Dallas Rural Water District (DRWD), which is supplying treated water, at two locations on the western McDonough County line. Storage for the initial 200 customers is to be provided from the DRWD system. The construction will be confined to private easements running parallel to the public right of way.

# The Results:

When this project is complete, 200 rural households and farms of McDonough County will have a safe and dependable potable water supply. The CO-OP will also be able to proceed with other phases of the project to supply water to the other 400 users it expects to serve.

# INDIANA EARTH DAY 2006

# **Town of Bruceville**

Loan: \$1,497,000.00 Grant: \$2,591,000.00 Other: \$500,000.00

Total Sewer: \$ 4,588,000.00

Congressman: John Hostettler, 8th

Senators: Richard G. Lugar

Evan Bayh

# **Outline of Need:**

In 1999, the Town of Bruceville was part of a regional group that completed a wastewater study. The group hoped to form a Regional Sewer District and pump all of their collective wastewater to a provincial site. Unfortunately, intergovernmental agreements could not be reached so the participant towns had to pursue individual solutions. After receiving a notice of violation from the Indiana Department of Environmental Management in 2003, Bruceville had no alternative but to initiate their own project.

Having no municipal wastewater collection or treatment system, most wastewater in the Town of Bruceville is provided partial treatment by onsite sewage systems consisting of privately-owned septic tanks and absorption field systems. In order to prevent potential future health problems and violations associated with the onsite sewage systems and discharge of partially treated wastewater, a plan of action was needed.

# **How Rural Development Helped:**

The Town of Bruceville contacted USDA Rural Development for financing of the project, and was also anticipating an application for a Community Development Block Grant with the Office of Rural Affairs. The proposed project consists of construction of a sewer collection system and a re-circulating sand filter treatment facility.

## The Results:

When this project is complete, the Town of Bruceville's residents will be able to avoid potential health problems with a safe and compliant wastewater collection and treatment system.

# KANSAS EARTH DAY 2006

# City of Quenemo

Loan: \$ 736,000.00 Grant: \$ 194,400.00

Total Sewer: \$930,400.00

Congressman: Jim Ryun, 2nd

Senators: Sam Brownback

Pat Roberts

## Outline of Need:

The city initially obtained non agency funds and conducted a television inspection on their collection system, and had a thorough study completed on their collection and treatment system. It was discovered that the city's wastewater treatment lagoons were overloaded and not meeting treatment discharge requirements. It was also discovered that the sewer collection system was subject to large amounts of Infiltration and Inflow.

During wet soil conditions and rainfall, the sewer system for the city's 468 residents was overloaded. Sewers would back up and discharge to the surface, or in homes, thus, bypassing of the treatment plant was usually required because of the high sewer flows.

## **How Rural Development Helped:**

The City of Quenemo completed the first two phases of their project with funds from the Kansas Department of Health and Environment along with the Kansas Department of Commerce. USDA Rural Development funds are being used for the third and final phase of the project. The proposed project consists of replacing nearly 6700 linear feet of eight inch collection line, 1140 linear feet of four inch collection line, 18 manholes, and appurtenances. The project will also consist of refinancing all debt associated with the sewer system (\$276,900). Refinancing of the existing debt is necessary to allow the city to maintain a reasonable user rate.

# The Results:

When this project is complete, Quenemo will have a compliant sewer system that removes all concerns of having sewer backups in homes and businesses.

# MAINE EARTH DAY 2006

# **Town of Milford**

Loan: \$ 1,112,000.00 Grant: \$ 488,000.00 Other: \$ 110,000.00

Total Sewer: \$1,710,000.00

Congressman: Michael H. Michaud, 2<sup>nd</sup> District

Senators: Olympia J. Snowe

Susan M. Collins

# **Outline of Need:**

The 18 residences on Sandy Point Road were in need of assistance as some of the septic systems were failing, likely causing untreated and partially untreated sewage to flow into the Penobscot River. According to the Maine Department of Environmental Protection, this untreated sewage was posing a health hazard to the residents of Sandy Point Road.

# **How Rural Development Helped:**

Rural Development provided a total of \$1,600,000 in the form of a Water and Waste Disposal Loan and Grant to replace three aging pump stations and sewer lines, and to install a sewer extension to the residences on Sandy Point Road in Milford. The pump stations are in great need of replacement as they are over 30 years old and have malfunctioned. Old clay tiled lines on Main Street have a significant infiltration history and will be replaced with this funding. Also, an extension to the Sandy Point Road will be developed to alleviate potential health hazards created by the untreated sewage seeping into the Penobscot River.

# The Results:

When this project is complete, the health issues associated with the untreated sewage will be removed, along with pollution to the Stillwater and Penobscot Rivers.

The Penobscot River is a historic river that has faced many environmental challenges. In 1996 it was identified as one of our nation's ten most endangered rivers. Recently, many initiatives including the Penobscot River Restoration Project have drawn attention to the need to preserve the river's environmental and cultural properties. Major efforts by Senator Susan M. Collins and Olympia J. Snowe have resulted in funding to protect New England's second largest river system.

# MARYLAND EARTH DAY 2006

# **Town of Loch Lynn Heights**

Loan: \$ 581,000 Grant: \$ 1,200,000

Total Sewer: \$1,781,000

Congressman: Roscoe G. Bartlett, 6<sup>th</sup> District

Senators: Paul S. Sarbanes

Barbara A. Mikulski

### **Outline of Need:**

The Town of Loch Lynn Heights located in Garrett County Maryland, part of the Appalachian Region, is a small community of less than 500 people. community was established as a resort town in the late 1800's but fell on hard times with the advent of the automobile. The sewer system includes many changes and additions as the town has evolved. The Town owns, operates, and maintains their collection system with sewage transmitted and treated by Garrett County Department of Public Work's treatment facility. As such, they now have an Inflow and Infiltration (I&I) problem that through studies have shown acts as an under drain in the community lowering the groundwater and sending diluted sewage with large amounts of water to be treated by the wastewater treatment plant. This is not only costly but hinders the operation of the system by diluting the concentrations of biochemical oxygen (BOD) and total suspended solids (TSS). Investigations have shown the system's polyvinyl chloride (PVC) and vitrified clay piping (VCP) have separated at the joints, are misaligned, broken and root bound causing the I&I problem. There are approximately 235 homes and businesses that will be served.

# **How Rural Development Helped:**

In Fiscal Year 2004, USDA Rural Development provided the Town of Loch Lynn Heights with a Predevelopment Planning Grant in the amount of \$14,606 to help pay for a preliminary engineering report to assist them in developing and outlining the costs and alternatives for the Town's I&I problem. This year, USDA Rural Development is providing the first phase of funding for the line replacement.

## The Results:

When the project is complete, Loch Lynn will have an environmentally efficient system to dispose of wastewater, and the old lines will be used as a surface runoff collection system. The correction of the inflow and infiltration problem will prevent the Town from having a consent order imposed.

# MICHIGAN EARTH DAY 2006

# Village of Shelby

Loan: \$ 3,000,000.00
Grant: \$ 690,000.00
Village: \$ 70,000.00

Total Sewer: \$ 3,760,000.00

Congressman: Peter Hoekstra, 2nd

Senators: Carl Levin

Debbie Stabenow

# **Outline of Need:**

The Village of Shelby is a small, rural, low income community, whose income is at 63% of the Michigan Median Household Income. The Village needs to make critical improvements to the existing treatment system. The system was constructed in 1970. The lagoon liners have been subject to attack by burrowing animals over the years and require close attention and regular maintenance. Treatment plant effluent is discharged to ground water in the Stony Creek watershed via an infiltration basin. The existing treatment facility was most recently permitted for groundwater discharge in 1993, expiring in April 1, 1998. The Village has not received a renewal from the Michigan Department of Environmental Quality (MDEQ). The treatment system is currently overloaded. The expired permit allowed for daily average flows of 131,500 gallons per day (gpd). Annual hydraulic loading now exceeds 153,000 gpd. The Village will not receive a new discharge permit without plant modifications. On September 21, 2005 the Village was required to enter into an Administrative Consent Order by the MDEQ that mandates action to correct their violations or face significant monetary fines.

# **How Rural Development Helped:**

The Village of Shelby is in need of affordable financing and contacted USDA Rural Development for financing of the project. The proposed project consists of upgrading the Shelby system to handle the projected 20-year wastewater flow and meet the discharge permit requirements by improving the existing lagoon system to a .23 million gallon per day (mgd) aerated lagoon system. A polishing lagoon will follow the aerated lagoon cells. New Rapid Infiltration Basins would be constructed south of the existing lagoons and serve as the new discharge locations. A Ferric Chloride feed system will be added to help remove and precipitate soluble phosphorus in aerated lagoon cells. Digested soils will need to be cleaned from the lagoon cells approximately every 15 to 20 years and land

applied as Class B biosolids for fertilizer value or dewatered and properly disposed of in a landfill.

# The Results:

Upon completion of this project, the Village of Shelby will have improved capacity and nutrient control of the lagoon system. The treatment facility will meet the 20 year planning period and be protective of the groundwater quality.

# MINNESOTA EARTH DAY 2006

## **City of Bigelow**

 Loan:
 \$680,000.00

 Grant:
 \$667,000.00

 Other:
 \$667,000.00

Total Sewer: \$2,014,000.00

Congressman: Gil Gutknecht, 1st District

Senators: Mark Dayton

Norm Coleman

#### **Outline of Need:**

The City of Bigelow presently treats wastewater with individual septic systems that are not meeting the requirements of the Minnesota Pollution Control Agency (MPCA). The community presently is considered "unsewered" with most of the homes having non-compliant septic systems. The City has been working with MPCA to help in the solution of the wastewater issue.

The 231 residents of Bigelow have decided that they need to build a wastewater system to become complaint with MPCA regulations and also move forward with building a new gravity collection system and a stabilization pond treatment system.

#### **How Rural Development Helped:**

The City of Bigelow contacted USDA Rural Development for financing. Rural Development partnered with the Public Facilities Authority of the State of Minnesota to provide the funding needed for the new central sewer system.

#### The Results:

When this project is complete, Bigelow will have a compliant wastewater system that will treat wastewater before being disposed of in a controlled discharge every spring and fall.

The health violations will be removed and the ground water will be cleaned.

## City of Hatfield

Loan: \$ 40,000.00 Grant: \$295,000.00 Other: \$295,000.00

Total Sewer: \$630,000.00

Congressman: Gil Gutknecht, 1st District

Senators: Mark Dayton

Norm Coleman

#### **Outline of Need:**

The City of Hatfield presently has a wastewater system that is not meeting the requirements of the Minnesota Pollution Control Agency (MPCA). They have been working with MPCA and Rural Development to find a solution to the wastewater issue. The present treatment system is beyond its useful life. The collection system is also in need of replacement.

The 47 residents of Hatfield have decided that they need to replace the system to become complaint with MPCA regulations and move forward with a new central collection system and mound treatment system.

#### **How Rural Development Helped:**

The City of Hatfield contacted USDA Rural Development for financing of the project. Rural Development partnered with the Public Facilities Authority of the State of Minnesota to provide the funding needed for the new central sewer system. The proposed project consists of replacing the gravity collection system within town and constructing a mound treatment system to the South of Hatfield.

#### The Results:

When this project is complete, Hatfield will have a compliant wastewater system that will treat wastewater before being disposed of in the subsurface soils.

## Faribault County – Huntley Area

Loan: \$ 360,000 Grant: \$ 732,000 Wastewater Infrastructure Fund Grant: \$ 732,000

Total Wastewater System: \$1,824,000

Congressman: Gil Gutknecht, 1<sup>st</sup> District

Senator: Mark Dayton and Norm Coleman

State Senator: Julie Rosen (24) State Representative: Bob Gunther (24A)

#### Outline of Need:

The Community of Huntley is a small, unincorporated community, population of 125, located in southern Minnesota in west-central Faribault County. Like many unincorporated communities, it is currently discharging its untreated wastewater into the county ditch system, Center Creek, and ultimately the Blue Earth River. With the adoption of Faribault County's 12 year septic upgrade plan in 2000, there was a need to address the wastewater needs of the county's unsewered communities, as current practices are not compliant with state and county regulations, and are detrimental in regard to water quality concerns that exist within our surface waters today.

In response to this need, Faribault County applied for and received a Local Water Management Challenge Grant from BWSR in 2001 to assist the unsewered communities of Huntley, Guckeen and Walters with developing a Waste Water Treatment Feasibility Study/Plan. These grant dollars were utilized to assist with searching out the most cost effective and feasible way to upgrade these communities.

#### **How Rural Development Helped:**

As a result of this assessment, Bolton and Menk, Inc. completed a Preliminary Engineering Report for Huntley with a recommendation of constructing a gravity collection system and regionalizing treatment by boring a force main line from Huntley to the neighboring City of Winnebago which utilizes a mechanical plant for the treatment of wastewater. Faribault County applied to USDA Rural Development for financing, as well as project support for the proposed sewer system. Faribault County, residents of the Huntley area and Rural Development have worked together throughout the process to secure a combination of loan and grant funds through Rural Development and the Public Facilities Authority of the State of Minnesota Wastewater Infrastructure Fund program.

#### The Results:

The completed wastewater project will truly be a joint project and will utilize the Huntley Sewer District, the County, and the City of Winnebago to achieve this water quality point source pollution project.

Faribault County continues to make great progress in addressing and cleaning up sources of pollution, whether from the point sources or the non-point sources. Faribault County also acknowledges the fact that this will continue to be an ongoing problem for the county and that it will take time to realize their accomplishments. In fact, a former County Commissioner, Ralph Prescher, used to often remind them that, "It has taken mankind over 150 years to create these problems, we would be foolish to believe that it can be fixed overnight".

## City of Kent

Loan: \$195,000.00 Grant: \$354,000.00 Other: \$354,000.00

Total Sewer: \$903,000.00

Congressman: Collin Peterson, 7<sup>th</sup> District

Senators: Mark Dayton

Norm Coleman

#### **Outline of Need:**

The City of Kent is currently without a centralized sewer system. Many of the individual septic systems are in violation of health standards according the Wilkin County Environmental Resources Management Office.

The loan and grant funds will be used to remove the health violations by installing a central collection system throughout the City with an intercept line that will carry the sewage to the neighboring town of Abercrombie, North Dakota for treatment.

#### **How Rural Development Helped:**

The City of Kent contacted USDA Rural Development for financing of the project. The proposed project consists of 6" PVC sewer mains, a grinder pump station, and a 4" PVC force main to pump the wastewater to Abercrombie's wastewater treatment system. Directional boring will be used to cross under the Red River. A connection fee to Abercrombie is also being financed in order for them to accept the additional capacity through expansion.

#### The Results:

Once this project is complete, the health violations in Kent will be removed. A centrally owned and managed sewage collection system will be installed and maintained for the residents, and a new partnership with a neighboring city will be formed.

# MISSOURI EARTH DAY 2006

## City of Rich Hill

Loan: \$ 603,000.00 Other: \$ 500,000.00

Total Water: \$1,103,000.00

Congressman: Ike Skelton, 4th

Senators: Christopher Bond

James Talent

#### **Outline of Need:**

Improvements are necessary at the Rich Hill water treatment plant in order to meet current regulations and the demands of the customers. The community of Rich Hill examined several different treatment options in order to determine the most cost effective approach to meeting the growing demands of the water needs.

The City of Rich Hill passed a bond of \$750,000 to cover the anticipated costs associated with the project. A water improvement sales tax issue was also approved by the voters of the City.

#### **How Rural Development Helped:**

The City of Rich Hill contacted USDA Rural Development along with the Missouri Department of Economic Development/Community Development Block Grant for financing of the project. The proposed project consists of upgrading the raw water intake structures, construction of a new clear well, and covering the clear well at the water treatment plant. Project financing will also allow for the construction of a new 100,000 gallon water tower. The project will serve a population of 1,473 with 758 connections.

#### The Results:

When this project is complete, Rich Hill will have safe potable water.

# Public Water Supply District # 1 of Harrison County

Loan: \$ 310,000 Grant: \$ 257,000

TOTAL: \$ 567,000

Congressman: Sam Graves, 6<sup>th</sup> District

Senators: Christopher "Kit" Bond

Jim Talent

#### Outline of Need:

PWSD # 1 of Harrison County is in violation of Department of Natural Resource (DNR) regulations and is unable to correct the deficiencies without a new source of treated water.

#### **How Rural Development Helped:**

Harrison PWSD # 1 requested assistance from Rural Development to help resolve outstanding DNR violations. It was determined that the most economical solution was to purchase treated water from adjacent PWSD # 2 of Harrison County. This project will fund internal distribution improvements and establish a connection to PWSD # 2 of Harrison County. This will provide the users of PWSD # 1 of Harrison County a safe, dependable source of treated water for their 345 users, including residents of the communities of Eagleville and Blythedale.

#### The Results:

When this project is complete, all users in Public Water Supply District 1 of Harrison County will have an adequate, dependable, safe, supply of water.

# Public Water Supply District # 2 of Harrison County

Loan: \$ 1,644,000.00 Grant: \$ 731,000.00

TOTAL: \$ 2,375,000.00

Congressman: Sam Graves, 6<sup>th</sup> District

Senators: Christopher "Kit" Bond

Jim Talent

#### Outline of Need:

Public Water Supply District (PWSD) # 2 of Harrison County provides water for 1,279 users, including the small rural communities of Ridgeway, Cainsville, Coffey and Gilman City. The Engineer analysis in April 2003 identified the need to expand the well field to supply the quantity of water required by the district. The adjacent PWSD # 1 of Harrison County is in violation of Department of Natural Resource (DNR) regulations and is unable to correct the deficiencies without a new source of treated water.

#### **How Rural Development Helped:**

Harrison PWSD # 1 and Harrison PWSD # 2 requested assistance from Rural Development to help resolve the DNR violations within Harrison PWSD # 1 and increase capacity within Harrison PWSD # 2. This project will fund internal improvements to increase capacity to allow PWSD # 2 of Harrison County to supply PWSD # 1 of Harrison County a safe, dependable source of treated water for their 345 users, including residents of the communities of Eagleville and Blythedale. The project will also improve the capacity and dependability of treated water for the existing 1,279 users of PWSD # 2 of Harrison County.

#### The Results:

When this project is complete, all residents of Public Water Supply Districts 1 and 2 of Harrison County will have a dependable, safe, supply of water.

# NORTH DAKOTA EARTH DAY 2006

## **City of Oakes**

Loan: \$ 3,490,000.00 Grant: \$ 1,625,000.00 Total Water: \$ 5,115,000.00

Congressman: Earl Pomeroy, 1st

Senators: Kent Conrad

Byron Dorgan

#### **Outline of Need:**

The City of Oakes does not provide any water treatment for its water. Currently, the raw water from the wells does not meet the National Primary Drinking Water Standard (NPDWS) for arsenic. The standard was created by the Safe Drinking Water Act (SDWA); however, the standard for arsenic has been reduced from 50 parts per billion (ppb) to 10 ppb. The city's arsenic levels are more than twice the required standard. A single dose of arsenic can be fatal and arsenic consumed in small amounts over a length of time has been found to cause adverse health effects. Other water issues to be dealt with include elevated hardness and silica levels which have caused numerous problems for the city's residents. Nearly every user must pre-treat their incoming water with a water softener. The hardness and silica effects the piping systems especially when the water is heated, which forms a scale causing reduced life of piping, plumbing fixtures, and any hot water feature.

#### **How Rural Development Helped:**

The City of Oakes contacted USDA Rural Development for financing of the project. The proposed project consists of constructing a new membrane softening water treatment plant, drilling a new well, and installing new water transmission lines.

#### The Results:

When this project is complete, City of Oakes will have a safe potable water supply that will comply with the arsenic requirement of the SDWA.

# NEBRASKA EARTH DAY 2006

## Village of Morrill

Loan: \$1,924,000.00 Grant: \$1,076,000.00

Total Water: \$3,000,000.00

Congressman: Tom Osborne, 3rd

Senators: Charles Hagel

Ben Nelson

#### **Outline of Need:**

This community is facing several different issues with its public water supply. The most critical concern at this time is with its water source. The Village currently has three municipal wells, which supply the potable water needs of this community. The water quality of all three wells has become an issue with the implementation of the new maximum contaminant levels (MCLs) for both arsenic and uranium. Presently two of the wells are out of compliance with the MCLs set for arsenic and uranium and the third is close to exceeding the MCL for arsenic. The Nebraska Department of Regulation and Licensure issued an Administrative Order on April 26, 2005 to the Village of Morrill public water system for its violation of the MCLs established for uranium.

The other issues that need to be resolved with the public water system relate to storage and the distribution system. The existing water tower is undersized and only provides 55,000 gallons of storage. To meet the average daily use of the Village this tank size needs to be at 300,000 gallons. On the distribution system there are some areas in the system were the mains have deteriorated, are undersized, or need to be looped to eliminate dead ends. This community also does not have every user on the system metered. At the present the only users that have meters are the commercial users. These deficiencies all need to be resolved to improve flows and pressures throughout the system and to promote water conservation practices.

#### **How Rural Development Helped:**

The Village of Morrill submitted a pre-application for assistance to the Water and Wastewater Advisory Committee in June of 2005. This application was reviewed by this committee and it was determined that USDA RD would be the best funding option for this project. The proposed project consists of the following improvements:

Development of a new water source consisting of two new wells.

- Installation of a transmission main (2500 LF) from the new well field to the existing distribution system.
- Installation/replacement of 1400 LF of water main, valves, hydrants, and water meters.
- Construction of a new 300,000 gallon storage tank.

#### The Results:

These improvements will allow the Village of Morrill to continue providing a dependable public water supply to its residents. It will also bring the system back into compliance with the Safe Drinking Water Act.

# NEW HAMPSHIRE EARTH DAY 2006

## Page Hill MHP Cooperative, Inc.

Loan: \$293,000.00

Total: \$293,000.00

Congressman: Charlie Bass, 2<sup>nd</sup>

Senators: Judd Gregg

John E. Sununu

#### **Outline of Need:**

The wastewater collection system at Page Hill Cooperative is comprised of small diameter (4 and 6 inch) pipes and one pump station with a force main. The collection system resembles one long multi-branched service connection constructed without manholes. It does meet NH Department of Environmental Services design standards. Additionally the pump station is not safe for the operator and has neither proper storage nor a back up generator. The wastewater from the Manufactured Home Cooperative collection lines is then discharged into the Town of Lancaster collection system on Page Road.

The storm water drainage system for the park is also inadequate. Serviced by only seven catch basins, the poorly drained soils and flat topography result in small ponds and flooding during periods of heavy rain and spring snow melt.

In addition to the infrastructure improvements, a small amount of money will be used to bring their community building into compliance with ADA. The community building is the office for the Cooperative and the place where the users meet.

#### **How Rural Development Helped:**

The Cooperative contacted USDA Rural Development through the NH Community Loan Fund's Cooperative Infrastructure Improvement group. The proposed project involves the replacement of existing and obsolete components of the wastewater collection system and storm water drainage system. The existing wastewater pumping station will be replaced to include an emergency storage tank. Storm water drainage will be improved with storm drains installed on two streets and site grading in other areas. The building used for public business will be improved to become handicap accessible. A small amount of money will also be used to loop water lines to eliminate dead ends.

#### The Results:

The proposed project will bring the Cooperative's wastewater collection system into compliance with state requirements, provide a safe work environment for the operator as well as back up power so that the system will continue working during power failures.

The drainage improvements will eliminate the small ponds and flooding that occurs now.

# NEVADA EARTH DAY

## **Canyon General Improvement District**

 Loan:
 \$1,076,000.00

 Grant:
 \$1,066,500.00

 Other:
 \$ 200,000.00

Total Sewer: \$2,342,500.00

Congressman: Jim Gibbons, 2nd

Senators: Harry Reid

John Ensign

#### Outline of Need:

The Lockwood Community Corporation consists of 94 mobile home units which have failing septic and leach fields. The leach fields of the systems are up gradient of the well head protection area for the Lockwood Community and the Canyon General Improvement District. The State of Nevada Department of Environmental Protection has been concerned with the failing Lockwood systems, and the leach fields contributing increased nitrate concentrations in the drinking water aquifer.

The Lockwood Community Corporation and the Canyon General Improvement District community residents met to discuss the best solution to address the wastewater system needs of both communities. The decision was to merge the two community systems, which would also merge operations.

The Canyon General Improvement District's treatment plant was at the end of its useful life, and would not support the increase flows of the Lockwood Mobile Home Park.

#### **How Rural Development Helped:**

The Canyon General Improvement District and the Lockwood Community Corporation contacted USDA Rural Development along with the State of Nevada Community Development Block Grant Program for financing of the project. The proposed project consists of the construction of a new SBR wastewater treatment plant to serve both communities and installation of 4,300 lineal feet of 8-inch sanitary sewer, and 1 lift station and other related appurtenances. The project will include abandonment of 20 septic tanks. At project end, the Canyon General Improvement District and the Lockwood Community Corporation will have merged their operations for wastewater services.

#### The Results:

When this project is complete, the Canyon General Improvement District and the Lockwood Mobile Home Park will have a wastewater collection and treatment system which will bring the communities into compliance with the Clean Water Act.

# NEW YORK EARTH DAY 2006

### **Town of Louisville**

 Loan:
 \$ 100,000

 Grant:
 \$ 500,000

 NYS Revolving (Loan) Fund:
 \$4,006,912

 NYS (Grant) Fund:
 \$1,173,388

 NYS Power Authority Grant:
 \$ 15,000

Total: \$5,795,300

Congressman: John McHugh, 23rd

Senators: Charles Schumer

Hillary Clinton

#### Outline of Need:

For years, the people of East Louisville have experienced bacteria and other issues with their private wells. They would periodically run dry, forcing residents to purchase bottled water or have water trucked in from other sources.

#### **How Rural Development Helped:**

The Town of Louisville contacted USDA Rural Development for the financing of the project. The proposed project consists of a water distribution system within the proposed water district, a new water storage tank and upgrades to the existing Louisville Water Treatment Facility to handle the additional demand.

#### The Results:

When this project is complete, the Town of Louisville will have safe potable water.

# OHIO EARTH DAY 2006

## **Crawford County**

Loan: \$3,013,000 Grant: \$1,764,000 Other: \$700,000

Total: \$5,477,000

Congressman: Paul Gillmor, 5<sup>th</sup>

Senators: Michael DeWine

George Voinovich

#### **Outline of Need:**

The Westmoor Area is not currently served by a central wastewater system. The need for the project arose from complaints to the Ohio EPA by the residents about sewer odors. It was determined that septic tank and leachfield effluent is being discharged into an open ditch and storm sewers in the area. Testing of the ditch by the Ohio EPA verified that there is considerable pollution. This ditch flows into the Olentangy River with the southern part of the river designated as scenic. Findings and Orders were issued by the Ohio EPA on December 30, 2005.

#### **How Rural Development Helped:**

Crawford County contacted Rural Development along with the Ohio Public Works Commission and the Ohio Water Development Authority for assistance in financing the project.

The proposed project consists of construction of a new sanitary sewer collection system to serve the unincorporated Westmoor Area in Polk Township, Northwest of the City of Galion. The collection system includes 27,400 LF of 8-inch sanitary sewer, 6,550 LF of 6-inch sanitary sewer, lift station and wet well on Tracht Drive, 1,470 LF of 4-inch force main from Tracht Drive lift station to Biddle Road wet well and lift station, and 4,970 LF of 12-inch force main pipe from Biddle Road lift station to the City of Galion wastewater treatment plant. The project also includes backfilling and resurfacing roadways.

#### The Results:

When the project is complete, the Westmoor Area of Crawford County will have a new sanitary sewer collection system that will eliminate the unsanitary conditions described above. The new sewer system will serve 241 residential users.

# OREGON EARTH DAY 2006

## MILES CROSSING SANITARY SEWER DISTRICT

Loan: \$1,483,000 Grant: \$1,500,000 Other: \$1,680,000 Total: \$4,663,000

Congressman: David Wu, 1<sup>st</sup> District

Senators: Ron Wyden

Gordon Smith

#### **Outline of Need:**

The homes and businesses in the Miles Crossing community, south of Astoria and west of Warrenton located at the south edge of the Youngs Bay Bridge, are very old and the methods of sewage disposal are on-site systems (septic tanks, seepage pits and cesspools). High groundwater in the area has caused many systems to fail or operate poorly. Septic system failure represents a significant potential public health hazard and limits the development of the area, affecting businesses as well as residential growth.

The soil and site conditions make it very difficult to properly treat and dispose of sewage in a safe manner that is protective of public health and the environment in the area. These diked tideland influenced soils drain very poorly. The groundwater level at lower elevations is very near the ground surface during the summer and at or above the surface during the winter. Surface discharges of untreated sewage may be directly or indirectly discharged into public water of the State.

#### **How Rural Development Helped:**

For Fiscal Year 2006, USDA Rural Development provided the District with a WWD Loan of \$1,483,000 and a grant of \$1,500,000. This is in addition to a \$2,070,000 loan and \$2,000,000 grant obligated in Fiscal Year 2004. Other funding includes a Community Development Block Grant (CDBG) for \$640,000. The District has also applied for a \$500,000 loan with a \$500,000 matching grant from the Oregon Economic and Community Development Department (OECDD). The District will also contribute \$40,000 of its own funds towards the project.

#### The Results:

Significant public health and water quality benefits will result from the removal of as many existing on-site systems as possible. The recommended project is a vacuum collection system and pump station to move wastewater to the City of Astoria for treatment thus providing the Miles Crossing community with a safe method of wastewater disposal and treatment.

# PENNSYLVANIA EARTH DAY 2006

### **German Township Sewer Authority**

Loan: \$3,145,000 Grant: \$4,800,000 Tap-In Fees: \$453,500

Total Sewer: \$8,398,500

Congressman: Congressman John Murtha, 12<sup>th</sup> District

Senators: Arlen Specter

Rick Santorum

#### Outline of Need:

Existing sewage facilities in the project area consist of wildcat sewers, on-lot sewage disposal systems and two non-municipal sewage treatment plants owned by the Albert Gallatin School District. Numerous on-lot systems located throughout the project area are malfunctioning due to small lot sizes, steep slopes and poor soil conditions. Many sections throughout the project service area experience intolerable conditions due to the gross pollution of untreated or improperly treated sewage. Phase II project costs are estimated to be \$10,351,500.

#### **How Rural Development Helped:**

Rural Development funding will be used to construct wastewater collection, conveyance, pumping and treatment facilities to service approximately 477 residential and commercial users in the Edenborn and McClellandtown areas of German Township. This is Phase I of the project.

#### The Results:

When this phase of the project is completed, users in Edenborn and McClellandtown areas of German Township will have a solution to improperly treated sewage and, therefore, will be provided with a healthier environment.

# SOUTH CAROLINA EARTH DAY 2006

#### Town of Lake View

Loan: \$1,161,000 Grant: \$842,900 Total Sewer: \$2,003,900

Congressman: John Spratt, 5th

Senators: Lindsey Graham

Jim DeMint

#### **Outline of Need:**

The Town of Lake View provides wastewater service to 379 residential, 72 commercial, and 2 industrial users through a system of collector sewer with treatment occurring at the Lake View Wastewater Treatment Facility. The facility is in need of improvements to eliminate the discharge into Bear Swamp, a tributary to the Ashpole Swamp before being received by the Lumber River. The treatment facility currently consists of a single aerated lagoon, a biotower and disinfection facilities and is also under a consent order by South Carolina Department of Health and Environmental Control (SCDHEC) to correct the discharge problem

The Town of Lake View considered two options for long term disposal of treatment facility effluent: 1) Pump to the City of Dillon or 2) Construct a new sprayfield facility. A comparison of alternatives indicates that construction of a new sprayfield is the most economical approach of effluent disposal.

#### **How Rural Development Helped:**

The City of Lake View contacted USDA Rural Development seeking financing for the improvements to the system. A loan of \$1,161,000 and a grant in the amount of \$842,900 from RD will fund this project. The proposed project consists of an intermittent sand filter, a new chlorine contact tank to accommodate the modified hydraulic profile, a new effluent pumping station and the 33 acre sprayfield. The additional capacity of the existing lagoon will be used for the required 7-day wet weather storage.

#### The Results:

When this project is complete, the Town of Lake View's Wastewater Treatment Facility will meet the needs of the community and provide them a healthier and more sanitary place to live. This project will eliminate the

discharge into Bear Swamp and this will improve the quality of the Lumber River. The project will also put the Wastewater Treatment Facility in Compliance with South Carolina Department of Health and Environmental Control's (SCDHEC) No-Discharge permit for the Wastewater Treatment Facility.

# SOUTH DAKOTA EARTH DAY 2006

### **CITY OF WAUBAY**

 Loan:
 \$ 624,000

 Grant:
 \$ 406,000

 Other:
 \$1,650,000

Total Water and Waste Disposal: \$2,680,000

Congresswoman: Stephanie Herseth, At Large

Senators: Tim Johnson

John Thune

#### **Outline of Need:**

In order to meet the demands of its existing and future customers, the City of Waubay's distribution system is in need of upgrades. Improvements to the Waubay system include eliminating the old cast iron pipe, reduce the water loss, and ensure that water quality in the distribution system is protected.

Over 60% of Waubay's water mains are old 4-inch, 6-inch and 8-inch cast iron pipe, which were installed in the mid-to-late 1930's. Additionally, Waubay has a significant amount of water that is unaccounted for in their distribution system. Therefore, water distribution upgrades include replacing the existing cast iron pipe with new 6-inch PVC water main pipes and replacing the existing valves, fire hydrants and water service connections to the property line.

The City recently televised their sanitary sewer lines and discovered more extensive damage than was initially expected, including longitudinal and circular cracks in the pipe, and joint displacement. The current wastewater treatment facility is also hydraulically overloaded. The wastewater collection system upgrades include replacing the existing 8-inch clay pipes with new 8-inch PVC sanitary sewer pipes, and replacing the existing sanitary sewer manholes with new 48-inch diameter pre-cast concrete manholes.

#### **How Rural Development Helped:**

The City of Waubay contacted USDA Rural Development for assistance with financing the project. The proposed Phase I total project cost is \$2,680,000 with funding of \$624,000 in loan and \$406,000 in grant being awarded through the USDA Rural Development Water and Waste Disposal Program.

#### The Results:

With the assistance that USDA Rural Development has provided, the community is now looking at construction of additional housing knowing that they can provide quality water due to the new infrastructure. Not only will the water quality be affected, but a vast improvement in the amount of water loss and the amount of chemicals needed to treat the water will be realized. This will also assist in the control of water infiltration into the wastewater system and may eliminate the need for Phase III of the project, which involves the relocation of the wastewater treatment facility.

# TENNESSEE EARTH DAY 2006

# **Town of Mountain City**

Loan: \$ 844,000.00 Grant: \$ 280,100.00 Other: \$ 2,110,850.00

Total Sewer: \$3,253,000.00

Congressman: William Jenkins, 1st

Senators: Bill Frist

Lamar Alexander

### **Outline of Need:**

For years, there have been numerous overflows and shut-downs of the Town of Mountain City's sewer system. Some years there have been an average of one sewer overflow per month. On occasion, the sewer overflows at the lift station and flows across State Route 67. One recent overflow resulted in raw sewage flowing across State Route 67 into Doe Creek. This type of release presents a number of health problems.

These sewer "outages" also create operational problems for the inmates and staff of the North East Correctional Center (NECX) which is the largest employer in the Town of Mountain City.

# **How Rural Development Helped:**

The Town of Mountain City contacted USDA Rural Development along with the Tennessee Department of Corrections for financing of the project. The project consists of upgrading the sewer line that extends from the Town of Mountain City to the Industrial Park and North East Correctional Center from an 8 inch to a 12 inch sewer line. This upgrade will spur growth at the Johnson County industrial park, while allowing the NECX to expand.

## The Results:

When this project is complete, the Town of Mountain City will have accomplished two goals. First, the overflow problems will be corrected, thus, providing a safer sewer system. Secondly, economic growth will be spurred with a new, larger sewer main on State Route 67.

# **Town of Bethel Springs**

Loan: \$1,459,000 Grant: \$676,800 Other: \$309,181 Total Project Funding: \$3,732,981

Senators: Bill Frist

Lamar Alexander

## **Outline of Need:**

The Town of Bethel Springs does not presently have a municipal sewer system. The residents provide their own means of disposal by using septic tanks and disposal fields. Nearly 80% of those septic tanks and disposal fields are malfunctioning and allowing discharge to ground surface or into drainage ditches. Representatives from the Tennessee Department of Health and Environment along with the McNairy County Health Center informed the town's officials that the only way to correct the problem is by providing municipal sewage disposal.

# **How Rural Development will Help:**

The Town of Bethel Springs asked for financial assistance from USDA Rural Development to help fund the wastewater project,. The proposed project consists of constructing a Septic Tank Effluent Pump (S.T.E.P.) Collection System or a Low Pressure System (LPS) with grinder pumps and pump station. The effluent will then be pumped to the City of Selmer and treated at their Waste Treatment facility. The new wastewater disposal system will allow all 763 Bethel Springs residents to have a safe and sanitary environment.

# The Results:

When this project is complete, the Town of Bethel Springs will be able to provide a safe and sanitary sewer disposal system.

# TEXAS EARTH DAY 2006

# **City of Jewett, Texas**

Loan: \$1,528,000

Total: \$1,528,000

Congressman: Joe Barton, 6th

Senators: Kay Bailey Hutchison

John Cornyn

# Outline of Need:

The City of Jewett installed its original water system in 1971 and the wastewater system in 1978. Both the water and wastewater systems require immediate attention in order to meet the minimum requirements of the Texas Commission on Environmental Quality (TCEQ).

The City's safe drinking water supply is rapidly declining. Only two of its three water wells are currently in service. Well No. 1 had to be plugged. The pump in Well No. 2 has been lowered twice (1996 and 1997) and a video camera inspection during the last pump lowering indicated that portions of the well screen are plugged. Well No. 2 has had several problems and is continually declining in production due to problems with the plugged screen. Well No. 3, drilled in 1983, originally operated at 310 gallons per minute (gpm). However, this well is now operating at 250 gpm due to a decline in the well capacity. The demand for a safe drinking water supply continues to increase as the City grows due to new employment opportunities in the area with Nucor Steel, the Texas Westmoreland Lignite Coal Mine and NRG's coal and gas-operated electrical generating plant.

The City's wastewater collection system and treatment plant were constructed in 1978 and currently have deficiencies. In order for the wastewater system to operate properly and within TCEQ regulations, the wastewater collection system must be upgraded in order to provide a decent and safe sewer system for the residents of the City.

# **How Rural Development Helped:**

The City of Jewett contacted USDA Rural Development for financial assistance with their proposed water and wastewater system improvement project. In order to correct deficiencies with the sewer system, the proposed project will consist of adding a second oxidation ditch, chlorine contact chamber, bar screen and grit chamber to the City's wastewater system, as well as improving the capacity of existing lift stations.

As for the City's water system, the proposed project will include the construction of a new deep well and pump, installation of a high service pump and other related appurtenances. To remove a safety hazard for the residents of the City, the inactivated elevated storage tank (constructed in 1936) will be demolished.

# The Results:

When this project is complete, the City of Jewett will have a safe potable drinking water system and an improved wastewater system meeting the needs of its residents as well as TCEQ requirements

# VIRGINIA EARTH DAY 2006

# Giles County – Route 100

Loan: \$ 596,000.00 Grant: \$ 521,700.00 Other: \$ 1,004,200.00

Total Water: \$ 2,121,900.00

Congressman: Frederick "Rick" Boucher, 9th

Senators: John Warner

George Allen

# **Outline of Need:**

The State Route 100 corridor of Giles County is not currently served by a public water system. For years, residents in this area, including the Oney and Mutter subdivisions, have depended upon individual wells, springs, and privately owned water systems to meet their water needs. During dry periods, residents experience quality and quantity problems with their present water sources. As these areas are located in karst terrain, drilling new wells is a challenge and leads to a greater potential for groundwater contamination. In addition, mountain springs have historically produced water with bacterial contamination.

# **How Rural Development Helped:**

Giles County contacted USDA Rural Development to discuss financing for this project and to receive assistance with developing an application. The County's existing water system currently serves 773 residential and 27 commercial users. This water line extension will provide public water service to an additional 106 households.

The proposed project consists of extending water lines to residents of the State Route 100 corridor of Giles County, Virginia. The project consists of the installation of 14,000 linear feet of 8-inch water line; 9,900 linear feet of 6-inch water line; 1,700 linear feet of 4-inch water line; the upgrading of two pump stations (Ingram Village and Bluff City); one new pump station; water meters; a 150,000 gallon water storage tank; and related appurtenances. This extension will connect into the Town of Pearisburg's existing system along State Route 100, and water will be provided, by contract, from the Giles County Public Service Authority.

# The Results:

Once this water line extension has been completed, the residents in the Route 100 corridor will be afforded one of our most basic resources: an adequate and safe supply of clean drinking water.

# WASHINGTON EARTH DAY 2006

# **City of Shelton Waste Water Treatment Plant**

 Loan:
 \$4,544,000

 Grant:
 \$4,178,000

 Washington State Patrol:
 \$ 47,223

 Washington Corrections Center:
 \$ 486,391

 City of Shelton:
 \$6,701,386

Total: \$15,957,000

Congressman: Norm Dicks, 6<sup>th</sup> District

Senators: Patty Murray

Maria Cantwell

### **Outline of Need:**

The City of Shelton's current wastewater treatment plant was built in 1979 to comply with the Federal Water Pollution Control Act Amendments (the Clean Water Act) of 1972 and 1979 and state receiving waters quality standards at a cost of \$5 million to provide required treatment until 2000. The wastewater treatment plant was designed to treat a high flow of 4 million gallons per day, but averages annually about 2.2 million gallons per day. During winter, flows can exceed 9 million gallons per day because of ground water that leaks into the sewer pipes. This leaking of groundwater into sewer pipes is called infiltration and inflow, or I&I, and overwhelms the wastewater treatment plant. The wastewater treatment plant discharges its highly treated wastewater, called effluent, into Oakland Bay through an outfall that extends 1,250 feet into the bay. City crews have worked hard over the years to keep the sewer collection, conveyance lines, and the wastewater treatment plant running as smoothly and economically as possible, but the old and worn out conditions of the sewer utility are overwhelming the innovative and hard working crews. Additionally, the City's NPDES permit expires in 2007 and it is expected that a new permit will require upgrades and additional wastewater treatment measures in order to be renewed.

# **How USDA Rural Development Helped:**

The Regional Plan is saving Shelton ratepayers millions of dollars with the partners leveraging additional grant and loan funding for the wastewater treatment plant upgrades by providing \$8 million in a USDA Rural Development Water & Waste Disposal Loan/Grant combination. The City of Shelton will come up with the remaining \$8 million. Rural Development funds will be used to upgrade the existing wastewater treatment plant as part of an overall regional water and wastewater system expansion that involves a new satellite wastewater

treatment plan, a water treatment plant and ongoing sewer collection rehabilitation work to reduce infiltration and inflow.

# WISCONSIN EARTH DAY 2006

# Village of Cashton & Village of Melvina

Village of Melvina: Village of Cashton:

Grant: \$ 860,800 Loan: \$494,000 Other: \$1,926,650 Grant: \$323,400

Total: \$2,787,450 Total: \$817,400

Congressman: Ron Kind, 3<sup>rd</sup>

Senators: Herbert Kohl

Russell Feingold

### Outline of Need:

Residents in the neighboring communities of the Village of Cashton and the Village Melvina in southwestern Wisconsin were each faced with environmental issues concerning water and wastewater systems. Area leaders from both communities, along with representatives from Rural Development, met to discuss options to jointly and cost effectively alleviate both community's concerns. Cashton faced the challenge of meeting all state and Federal environmental requirements at their wastewater treatment facility, while Melvina residents faced ecoli-contamination in over 35% of their tested wells, creating serious health concerns in their community. Over a series of meetings, the communities decided to pool their resources. The solution involved the regionalization of utilities between the two communities.

### **How Rural Development Helped:**

The Villages both applied for and received funding from Rural Development for financial assistance. Additionally, the Village of Melvina also gained financial support from a WI Department of Commerce Community Development Block Grant, as well as a Hardship Assistance Grant through the Clean Water Fund, State of WI Department of Natural Resources.

Plans were drawn to replace the wastewater treatment facility in the Village of Cashton, therefore, meeting current state and federal environmental requirements for their 1,006 residential users. In Melvina, the decision to construct a pipeline to connect them to the nearby Cashton services was made. At the project finish, Melvina will purchase water and contract for sewer treatment from Cashton's new treatment facility; therefore, also alleviating health risks for Melvina's 93 users.

### The Results:

At the completion of these projects, a regionalized utility system will result. Residents in both Cashton and Melvina will have access to clean water and safe water treatment that meets all state and Federal regulations, without ecoli contamination or other serious health concerns.

# WEST VIRGINIA EARTH DAY 2006

# Branchland-Midkiff Public Service District

 Loan:
 \$1,547,000

 Grant:
 \$ 903,000

 Other:
 \$2,150,000

Total Water: \$4,600,000

Congressman: Nick J. Rahall, 3<sup>rd</sup> District

Senators: Robert C. Byrd

John D. Rockefeller, IV

# **Outline of Need:**

The residents in the Fourteen-Mile area of Lincoln County, and the Cove Gap area of Wayne County, West Virginia, have lived without a reliable source of potable water for many years. Many of these residents have well water of insufficient quantity and/or poor quality. They have purchased water softener treatment systems, salt and other chemicals in order to attempt to treat the well water. Others spend hundreds of dollars a month hauling potable water and purchasing bottled water for drinking and cooking. The PSD has demonstrated its commitment to providing service to these areas by its willingness to borrow a substantial amount of the funding for this project.

# **How Rural Development Helped:**

USDA Rural Development received an application from the District in February of 2004 for the proposed "Fourteen-Mile" water extension project. Construction will consist of approximately 24 miles of new waterline, one 50,000 gallon water storage tank, one 150,000 gallon water storage tank, one booster pump station, one pressure reducing station, 50 fire hydrants, a new office building, and necessary appurtenances.

## The Results:

This project will provide a safe and reliable source of water and improve the lives of approximately 300 rural residents who desperately need such a service.

# Paw Paw – Route 19 Public Service District

Loan: \$1,380,000 Grant: \$1,000,000

Total Water: \$2,380,000

Congressman: Alan Mollohan, 1<sup>st</sup> District

Senators: Robert C. Byrd

John D. Rockefeller, IV

# **Outline of Need:**

The Paw Paw Rt. 19 PSD was established in 1963 for the purpose of providing a safe and reliable source of potable water for residents within rural areas of Marion and Monongalia Counties, West Virginia. The District owns and operates its own water distribution and storage facilities. According to a recent survey performed by the WV Public Health, Office of Environmental Health Services, it was recommended that an existing water storage tank be restored, an existing pump station be repaired and water mains 1.5 inches in diameter serving two or more customers should be at least two inches in diameter. Also, the water distribution system is currently operating at a 53% water loss, which does not provide satisfactory pressure for daily living.

# **How Rural Development Helped:**

USDA Rural Development received an application from the District in October of 2005 to address the problems associated with the water distribution system. Construction will involve the installation of approximately 23,900 linear feet of waterline, two new booster pump stations, a new 200,000 gallon water storage tank, and the repair and painting of an existing 30,000 gallon water storage tank.

# The Results:

Upon completion, this project will reduce water loss and significantly improve the lives of approximately 500 rural residents within the Rivesville and Arnettsville areas of Marion and Monongalia Counties.